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## ABSTRACT

Current evaluation activities in the New Jersey school system are surveyed, and recommendations for future evaluation efforts are made. The current activities and future developments of school (or school district), statewide, and project (or program) evaluation are discussed individually. The following program objectives are suggested: to raise the number of trained education evaluators, to strengthen evaluation capability at each administrative level, to install satisfactory evaluation instruments, to administer instruments which evaluate pupil performance in relation to local and State goals, to expand district evaluation so that all schools are evaluated on a cyclical basis, to evaluate school districts for Bateman incentive aid qualification, to expand evaluation so that all projects financed through the Department are evaluated on a cyclical basis; and to increase expenditures for evaluation activities. Strengths and weaknesses of several program alternatives are discussed. Recommendations for short-range action are made concerning school district, statewide, and project evaluation, and recommendations for long-range action are made concerning needs assessment, management information system, cost analysis, instruction, and department task analysis. Additional questions for consideration are listed. An analysis of costs and an overview of an ETS survey of State testing programs are presented in appendices. (KM)

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EVALUATION IN NEW JERSEY EDUCATION

A SURVEY OF PRESENT PRACTICES AND RECOMMENDATIONS FOR FUTURE ACTION

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A REPORT TO THE STATE BOARD OF EDUCATION

PRESENTED BY THE BOARD SUB-COMMITTEE ON EVALUATION AND TESTING

PREPARED BY THE DIVISION OF RESEARCH, PLANNING AND EVALUATION

DEPARTMENT OF EDUCATION

TRENTON, NEW JERSEY



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1970

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## I. INTRODUCTION

In September 1969, the State Board of Education declared its intention to undertake a thorough examination of current evaluation activities in the New Jersey public school system.

To accomplish this aim, a Board Sub-Committee on Evaluation and Testing was appointed. Six Board members were named to the Sub-Committee:

Mrs. Leonard L. Mancuso, Chairman  
Mrs. Hugh Auchincloss  
Mrs. Marion G. Epstein  
Mr. Calvin J. Hurd  
Mr. George F. Smith  
Mr. William A. Sutherland

The work of the Sub-Committee would include a review of pertinent documents and present practices, plus an exploration of various evaluation alternatives presented by guest authorities.

The first meeting of the Sub-Committee was scheduled for October 16.

### A. Proceedings: October 16, 1969

The chairman opened the meeting by reviewing the charge to the Sub-Committee, which was to make recommendations to the State Board concerning a Board evaluation philosophy, a Board evaluation policy, and suggested State evaluation procedures. The Sub-Committee was asked to recommend the direction evaluation activities should take, as well as priorities among evaluation needs.

Stanley Salett, Assistant Commissioner, Division of Research, Planning and Evaluation, discussed three principal evaluation categories and summarized the Department's activities in each category:

1. Project Evaluation - Mandated evaluations of Federally funded programs have sharply increased our activity in this area.
2. School District Evaluation - The school evaluation efforts of the Division of Curriculum and Instruction serve as a foundation for this category. Should the Bateman Plan become a reality, school district evaluation would assume major importance.
3. State-wide Evaluation and Testing - Thus far, the Department's activity in this area has been relatively modest, although we have kept abreast of promising developments in other states. Our proposed Management Information System, however, will give us a much greater capability to deal with data analysis. In addition, the mandate for a state-wide Title III needs assessment program could be the forerunner of a broader state-wide evaluation.

Since the Department has inadequate resources to undertake a maximum effort in all three categories, priorities must be clearly enunciated.

Following this presentation, members of the Department's Coordinating Council for Evaluation were invited to describe the evaluation activities of their divisions.

Upon completion of these reports, the Chairman asked the Sub-Committee to suggest future agenda items. Several members recommended that state-wide evaluation be explored at the next meeting.

B. Proceedings: November 12, 1969

After reviewing the proceedings of the first meeting, the Chairman invited Commissioner Marburger to comment on the task facing the Sub-Committee. The Commissioner responded by noting the pressing need for both short-term and long-term plans for evaluating the issues, problems and concerns of education in the State. He also pointed out the necessity of an evaluation of the Department of Education which would go beyond that rendered for Title V early in 1969. In addition, he stressed the requirement of an adequate data base as the first priority for an evaluation program. To acquire this data base, the Department must develop an effective management information system.

John Casey, Assistant Director, Office of Research, then presented the Metropolitan School Study Council's findings on "Indicators of Quality". This concept bases its evaluation of a school's quality on observable characteristics of classroom teaching.

In the afternoon session, Dr. Henry Dyer, Vice President, Educational Testing Service, discussed state assessment projects with which he had been associated (New York, Pennsylvania, Michigan). After questioning Dr. Dyer about various facets of these projects, the Sub-Committee moved to invite representatives from Michigan and Pennsylvania to its next meeting. These guests would be requested to discuss problems encountered in the initial stages of an assessment project, plus the costs involved.

C. Proceedings: December 16, 1969

After acceptance of the minutes, the Chairman asked Frank Pinkowski, Assistant Director, Office of Evaluation, to introduce each of the participants on the program.

John Kennedy, Bureau of Curriculum, Pennsylvania Department of Public Instruction, was the first speaker. Mr. Kennedy discussed the Community Needs Assessment Project which was initiated in Pennsylvania during the current school year.

Fifteen school districts, representing urban, suburban and rural areas, had volunteered to take part in the project. Its purpose was to design, in each community, an educational program which is based on the community's needs as perceived by school staffs, students and parents.

The Department of Public Instruction provided a liaison staff person with technical ability in planning to each district. The initial efforts of this planner were centered on staff in-service training and the development of lines of communication between the various individuals involved.

Since the project is less than four months old, it is too early to assess its results. In the spring of 1970, however, each district's activities will be reviewed, and the next steps will then be determined. It is anticipated that districts will have progressed at different rates, so future activities will be scheduled on an individual basis.

Dr. Paul Campbell, Director of Quality Assessment, Pennsylvania Department of Public Instruction, was the next speaker. Dr. Campbell pointed out that, by law, his department is responsible for assessing the quality of education in the State. To carry out this obligation, it was necessary to determine what was to be assessed; therefore, between 1963 and 1965, a series of regional conferences was held to determine the goals of the educational system. This effort resulted in a statement of ten education goals for the state.

Dr. Campbell's office is responsible for designing the instruments which measure the achievement of these goals. The initial testing effort, involving 100 districts, took place during the 1967-68 school year. After analyzing the resulting data, refinements of the instruments have been made.

Pennsylvania believes that the Quality Assessment and Community Needs Assessment Projects will reinforce each other. A school district might use the quality assessment instruments to compare its programs with districts having similar characteristics. Its comparative performance might be useful in the district's planning operation.

Dr. Philip Kearney, Associate Superintendent, Bureau of Research, Michigan State Department of Education, discussed his state's assessment and testing program. In October 1969, the Michigan legislature directed the Department to begin to plan and develop a comprehensive program for needs assessment and to assess certain basic skills during the 1969-70 school year.

In January 1970, all fourth and seventh grade pupils in Michigan will be tested in the area of basic skills. Educational Testing Service has developed a test battery under contract with the State. The cost of the battery, score sheets and test scoring is \$ .46 per pupil.

Concurrently, a fifteen-member task force, charged with the responsibility of drafting a statement of Michigan's education goals, has been organized. After the statement has been prepared, a series of regional public meetings will be held. Citizen opinion, as voiced at these meetings, will be reviewed by the task force prior to its formulation of the final goals statement. The Department of Education will then be responsible for establishing procedures for assessing these goals.

Following Dr. Kearney's presentation, the Sub-Committee asked a number of questions concerning Michigan's philosophy of testing, activities which preceded the legislative mandate, technical points on the instruments, and administration of the program.

Mr. Robert Locke, Chairman of the Title III State Advisory Council, examined the relationship between a Title III Needs Assessment survey and the Sub-Committee's work on evaluation. He pointed out that the Federal Government



requires that the allocation of Title III funds be based on an assessment of the State's education needs. Though such an assessment is presently being developed, there are unanswered questions concerning the scope of the project.

Should this assessment of needs, asked Mr. Locke, be limited to the narrow confines of Title III? Or should its scope be broadened to cover the full range of the State's education needs? Furthermore, if the latter course is chosen, shouldn't the State Board and the Commissioner assume responsibility for the project, rather than leaving it under the auspices of the Title III Advisory Council?

Dr. Bernard A. Kaplan, Director, Office of Planning, offered a second presentation on needs assessment. He asked that the State Board approve a needs assessment project and that a special advisory council, composed of representatives from the State Board, the Title III Advisory Council and lay people, be established to guide the activity. The Sub-Committee requested that Dr. Kaplan prepare a statement for the Board's approval; he was asked to present it at the next meeting of the Sub-Committee.

D. Proceedings: January 15, 1970

Following acceptance of the minutes, the Chairman invited Mr. Pinkowski to deliver his presentation on the Belmont Project. (See Part V-B-1 of this report for a discussion of Belmont.)

At the conclusion of the presentation, Mrs. Mancuso asked whether the Belmont Project would provide adequate data or a suitable conceptual framework for a state-wide evaluation system. Mr. Pinkowski replied that Belmont's intention was to evaluate the effect of Federal programs and to enable the State to develop a coordinated plan for such programs. Belmont will also provide information for simulation models which can test various formulas and strategies for the expenditure of Federal funds. However, Belmont does not supply data relating to the total educational program being conducted in a local school district.

Mr. Pinkowski then reported on the National Assessment of Education Project. The Sub-Committee recommended that the project director be contacted to explore the possibility of using National Assessment materials on a state-wide basis.

After the chairman reviewed the Needs Assessment discussion of the last meeting, Mr. Salett and Dr. Kaplan distributed a statement prepared as a recommended resolution for action by the State Board of Education. The Sub-Committee asked for clarification of several potentially ambiguous terms ("educational goals", "educational objectives", "needs assessment"). It suggested certain minor modifications and requested that a revised statement be submitted to the State Board on January 26.

The Chairman pointed out that the Sub-Committee would be asking the State Board to approve the determination of broad goals and objectives for education in New Jersey. She posed these questions: "Is the Sub-Committee convinced that it feels the initial effort of Title III should be extended into a state-wide goals and objectives program? If so, is this an appropriate



time to make that resolution to the State Board?" The Sub-Committee unanimously answered both questions in the affirmative, and it also agreed to recommend that the State Board appoint a special advisory council for the Needs Assessment Project.

The Chairman then asked the group to consider possible future activities of the Sub-Committee. Mr. Salett suggested that the Division of Research, Planning and Evaluation could prepare a background paper which would summarize the feasibility and costs of various types of evaluation (school district, state-wide, project). The Sub-Committee approved this idea and decided to schedule its next meeting upon completion of the paper.

(Note: The Sub-Committee met on April 16 and May 1, 1970 to discuss preliminary drafts of this report.)

## II. DEFINITION OF THE PROBLEM

This report accepts the premise that evaluation can have a positive effect upon the education of students in New Jersey. It directs its attention to current evaluation activities in the State, pointing out unmet needs and suggesting ways of satisfying them.

### A. Basic Questions

The nature of a particular evaluation plan can be determined by examining it in relation to four basic questions:

1. What is being evaluated? Are we looking at one school, at a school district, at a project or program, or at students?
2. What method is employed? Is it self-study, observation, testing, data collection and interpretation, or a combination of methods?
3. Who does the evaluation? Is it conducted by the Department of Education, by the local school district, or by an outside concern, or in some combination?
4. Why is the evaluation being done? For example, do the findings of the evaluators affect the size--or the continuation--of financial aid? Do we intend to employ evaluation results in planning program improvements?

### B. Emphasis and Impact

In educational evaluation, emphasis has traditionally been placed upon measurement of inputs: class size, expenditure per pupil, age of school buildings or textbooks, size of library, teacher preparation. This approach overlooks the frequent disparity between the amount of inputs invested by the educational system and the quantity that is actually received by the child. But more important, there is no necessary correlation between amount of inputs and level of student progress. For that reason, it is necessary to focus attention on output--the specific changes in pupil achievement which stem from a given activity.

Yet, the latter approach, while logically superior, faces major obstacles of its own. For though it might be relatively easy to measure academic achievement, how do we assess such intangible goals as the development of creativity, initiative, self-concept, and self-respect? All are elusive; they are hard to define and no less difficult to assess.

Let us assume, however, that such problems can be overcome. After we have devised acceptable indicators and valid instruments, we then must decide what to do with the mass of data produced by our evaluations. Hopefully, our findings will help us to strengthen current programs and to develop new ones which more adequately meet the needs of students. But evaluation should also contribute answers to questions of accountability, equal opportunity, distribution of resources according to need, and significant structural change.

### C. Numerical Magnitude

The sheer size of education in New Jersey is a major factor affecting the choice of specific evaluative modes. As of September 1969, the State's 572 operating school districts contained 2,385 public schools, classified as follows:

Elementary Schools	-	1,917
Junior High Schools	-	107
High Schools	-	284
Vocational or Trade High Schools	-	22
Special Schools for the Handicapped	-	55

Pupil enrollment totalled 1,454,378 (elementary--961,372; secondary--493,006), and there were 80,113 full-time teachers and other certificated personnel.

Since roughly 80 per cent of the schools and almost two-thirds of the pupils were at the elementary level, they were subject to no uniform evaluation program.

New Jersey's private and parochial schools numbered 660 in 1968-69, and they enrolled 312,609 pupils. With few exceptions, these schools were exempt from mandatory state evaluations.

### D. Statutory Basis

Evaluation is not specifically mandated in New Jersey's Education Law. Several statutes, however, empower the State Board of Education and the Commissioner to take action which in effect, if not in name, is clearly evaluative. Title 18A:4-10 vests general supervision and control of public education (except higher education) in the State Board; it orders the Board to "formulate plans and make recommendations for the unified, continuous and efficient development of public education." With the approval of the Board, the Commissioner is permitted through a second statute to "prescribe minimum courses of study for the public schools and require boards of education to submit to him for approval or disapproval courses of study adopted by them" (18A:4-25).

A third statute, 18A:4-24, provides broad authority for evaluative activities: "The Commissioner shall, by direction or with the approval of the State Board, whenever it is deemed to be advisable so to do, inquire into and ascertain the thoroughness and efficiency of operation of any of the schools of the public school system of the state and of any grades therein by such means, tests and examinations as to him seem proper."

These statutes, plus the need of its divisions to carry out various State and Federal mandates, undergird the Department of Education's evaluative role. Of most importance, perhaps, has been the impetus to rigorous evaluation provided by ESEA Title I, Section 205(a) (5), which called for annual evaluation of programs and projects. This requirement, subsequently extended to six other ESEA Titles, created a climate in which evaluation of activities, with emphasis placed upon output, became commonplace. In New Jersey, the Bateman School Aid Plan, whatever its final shape, should serve as an added prod to strengthened evaluation in the schools.

E. Need for Action

Without denying the need for careful consideration of distinct approaches, it should be emphasized that the time for broadening evaluation activities seems long overdue. From all sides, our schools are being pressed to offer evidence of their accomplishments as the price for the public's continuing support. Disgruntled taxpayers have joined critics from outside the educational establishment in calling for a thorough accounting of what takes place inside the classroom. Both city and suburban parents, whether enraged or merely troubled, are less apt to be reassured by a principal's soothing words than formerly. And increasingly restive students, newly aware of their rights and power, pose embarrassing questions about the validity and utility of the entire school experience.

Evaluation should help to answer these questions. It should reveal more precisely what schools are doing; then it should show how school activities affect--for better or worse--the lives of children and their subsequent adult performance.

With this backdrop, we will proceed to examine each of the three principal categories of education evaluation.

### III. SCHOOL (OR SCHOOL DISTRICT) EVALUATION

Schools are evaluated according to their physical and human resources (plant and people--both professionals and students), the nature of their curricula, and the breadth of services offered. The schools may either be looked at discretely--with each school regarded as an independent entity--or they may be viewed as parts of one school district. The distinction defines the difference between "school evaluation" and "school district evaluation". It is school evaluation which, at the secondary level, is now conducted in New Jersey. Recently, however, the Department completed a comprehensive evaluation of the Camden School District.

The criteria by which schools and school districts are evaluated--and approved--may either be established locally (self-study, school plan, district plan), or fixed externally (by the Department, some other State body, or the Federal Government). The agency which sets the criteria will generally determine the relative weight to be given to objective assessment, as against subjective appraisal.

#### A. Current Activities

1. The Division of Curriculum and Instruction evaluates and approves secondary schools. Each secondary school is evaluated every fifth year. The procedure, which combines self-study and team visitations, is analogous to that employed by the Middle States Association for its decennial accrediting evaluations. The Division anticipates extending its evaluations to elementary schools, with follow-up guidance provided by "educational improvement attack forces".

#### Secondary School Approval Procedure

Title 18A:45-1 and the Rules and Regulations of the State Board of Education provide for the approval of secondary schools. Using the Self-Study Procedure, approximately 100 public secondary schools are visited each year. The Division of Curriculum and Instruction works in close cooperation with the county superintendents in these periodic visitations; also, other offices, divisions and personnel of the Department are enlisted in the activity.

An outline of the Self-Study procedure is as follows:

- a. Establishment of annual list of secondary schools to be visited and approved.
- b. Numerous county meetings, visits to local schools, and office conferences to orient administrators and teachers to self-study procedures.
- c. Distribution of "Guidelines for Self-Study Procedures for State Approval."
- d. Establishment of Central Office (i.e., Department of Education) team memberships. Assignment of team leaders to coordinate and orient team members.

- e. Procedures developed by local school to study and evaluate its program. Participants include administrators, teachers, special personnel, students and parents. They will identify program strengths, needs and plans which will be published in the Self-Study Report.
- f. Visitation made to the school, after review of Self-Study Report, by visitation team.
- g. Individual visiting team reports collated and fused into a report to the school, which is submitted to the Deputy Assistant Commissioner for review and recommendation for approval to the Commissioner.
- h. Advisory services and follow-up services provided to local school to overcome identified needs and provide assistance in developing future plans.

The typical visitation costs<sup>1</sup> for the Self-Study Procedure for a secondary school are:

State Coordination	\$109.00
Secretarial Coordination	56.06
Visitation Team:	
a. Central Office Professional (3)	560.28
Central Office Secretarial	42.04
b. County Superintendent & Staff (3)	582.49
County Superintendent Secretarial	56.06
State Review and Approval:	
a. Professional	57.62
b. Secretarial	17.04
Advisory Services:	
a. Professional (2)	180.60
b. Secretarial	11.53
Total State & County Costs Per School: <sup>2</sup>	\$1,672.72

During 1969-70, 108 secondary schools--with 114,779 pupils and 6,752 teachers--will participate in the Self-Study Program.

#### Consultations

The direct contact made by representatives of the Division's Office of Secondary Education with individual schools accounts for a great amount of the time of each member of the Office. These school contacts are usually at the site of the particular school, but often are made in office conferences held at the State Department of Education building in Trenton.

<sup>1</sup> See Appendix A for method of calculating Department of Education salary costs.

<sup>2</sup> Figures based on a normal work day and do not include extended work day, evenings and overtime efforts.

Telephone calls and written correspondence with people from schools are a major form of daily activity, but no effort is made here to enumerate or evaluate the effectiveness of these. They do utilize many man-hours of professional time, however.

The school consultation activity focuses upon matters dealing with secondary education in general, as well as on particular curriculum areas, such as science and music. Although the primary effort is toward secondary education, much of the subject area consultation is with elementary schools, especially if they are part of a K-12 curriculum revision program. These school contacts, in addition to the school approvals which are scheduled by the Office of Secondary Education in cooperation with the County Superintendents, are scheduled through a variety of channels. These channels include requests made directly to the consultants, arrangements growing out of reviews of applications for the approval of course additions, and needs identified in relation to the school approval Self-Study.

A survey was made of school consultations encompassing a period of almost two school years (September 1966 to May 19, 1968). The major findings of this evaluation were:

- a. Contact with individual secondary schools in the form of visitations or office conferences for the purpose of providing consulting services were made with 79 per cent of New Jersey public secondary schools. (Total number - 408)
- b. By category and number of schools, the visits or office conferences for that period were as follows:  
  
School Approval - 186  
Administration - 75  
Curriculum, General - 14  
Pupil Personnel Services - 90 (NDEA, Title V-A)  
ESEA (Titles I & III) - 11  
NDEA - Administration - 105  
Art - 6  
English - 35 (NDEA, Title III)  
Foreign Language - 60 (NDEA, Title III)  
Humanities - 18 (ESEA, Title V)  
Math - 24 (NDEA, Title III)  
Music - 41  
Science - 35 (NDEA, Title III)  
Social Studies - 100 (NDEA, Title III)  
TESOL - 10
- c. Schools in all 21 counties received consultant services and visitations.
- d. Of the ten largest urban school districts, all were visited or had office conferences with representatives of the Secondary Office. A total of 44 separate school contacts were made.
- e. Representatives worked with 299 different elementary schools in all but three counties during that time.
- f. Consultant service was provided in all areas of the curriculum, as well as in secondary administration, curriculum, guidance and co-curricular activities.
- g. Fifty-nine private school visitations were made; forty-three of these were in connection with the school approval process.



### Elementary School Self-Study Procedures

During 1969-70, an elementary school in each of the twenty-one counties will pilot-study a "Self-Improvement Instrument" for elementary schools. The purposes of these twenty-one pilot studies will be to evaluate the effectiveness of the instrument, ability of elementary staffs to engage in self-study, costs and availability of resources, and need for in-service programs for elementary school administrators. The eventual goal is to develop a K-12 self-study procedure that will embrace early childhood, kindergarten, elementary, middle, junior and high school levels, with a district-wide approach to evaluation and self-improvement.

At this time, it would be difficult to estimate costs per pupil to SEA, County Superintendent, and LEA, when the factors under study (listed above) have not been completed.

### Follow-Up Attack Forces

The Division of Curriculum and Instruction envisions the creation of "follow-up attack forces" which will seek to remedy deficiencies found during the self-study process. Full germination of ideas concerning the follow-up attack forces has not yet taken place. It must, of necessity, wait for certain basic decisions, monetary and policy, to be made concerning the way in which school approval procedures will expand.

A tentative projection of costs has been offered by Mr. Robert Seitzer, Assistant Commissioner. He has estimated that out of a potential of 180 days, the attack forces might work 150 days. With an average daily force of 10 people, this would be 1,500 man-days. At a daily rate of \$50, this would cost \$75,000. Since these people are to be drawn from local school districts, pay for substitute teachers, which might average \$20 a day--or a total of \$30,000--would be required.

Total projected annual cost for follow-up attack forces: \$75,000 plus \$30,000 = \$105,000.

Other school evaluation activities undertaken by the Division of Curriculum and Instruction include the inspection of more than 600 non-public child-care centers; the approval of secondary school courses and summer sessions; and special evaluations of schools and districts upon the request of the Commissioner and the State Board of Education. These activities are mandated by Title 18A or State Board regulations.

The Division of Business and Finance audits the financial records of all public school districts; holds budget hearings when local school budgets are defeated by the electorate; approves extension of credit when legal debt limits must be exceeded for school construction; and prepares the Commissioner's Annual Report of Comparative Statistics. In addition, the Division's Bureau of School Building Services reviews all specifications and blueprints prior to facility construction; and when new facility requirements are instituted, it checks for compliance.

The Division of Vocational Education registers private vocational schools, licenses their teachers, and conducts periodic evaluations. The following outline summarizes these activities:

- A. Registration and Regulation of Private Schools
  - 1. Legal basis: N.J.S. 18A:69-1 through 16
    - a. "Standards for the Regulation of Private Trade Schools" (printed).
    - b. "Checklist for Establishing Private Vocational Schools" (printed).
  - 2. Procedures for Application and Approval
    - a. Letter of request to establish a private trade and technical school from applicant.
    - b. Interview of the applicant.
    - c. Inspection of facilities.
    - d. Review of plans for administration and instruction; assisting in development of such plans.
    - e. Comprehensive inspection of all items pertaining to total school operation.
    - f. Issuance of approval certificate.
  - 3. The school's certificate so approved is valid for only one year. Renewal of the certificate should proceed as follows:
    - a. Training establishment submits renewal data on form provided.
    - b. Renewal application evaluated.
    - c. Inspection visit of physical facilities to insure total compliance with rules and regulations.
    - d. Issuance of approval for following 12-month period.
- B. Teacher Licensing
  - 1. Legal Basis
  - 2. Procedures
    - a. Submit written application and certain documents.
    - b. Evaluation of the application.
    - c. Issuance of appropriate license in compliance with rules and regulations.
- C. Evaluation of Private Trade Schools through Visitation and Review of Annual Report for Fulfillment of Request for Renewal Approval
  - 1. Legal Basis
  - 2. Procedures
    - a. Visits are made by professional staff of the Private Trades and Technical Schools Office.
    - b. A minimum of three visits per year are anticipated, more if problems exist.
    - c. Visitation reports are filed in the school's folder for future reference.

The annual cost of evaluating each of the 61 approved private trade and technical schools is \$211. This approximate figure breaks down into the following components:

1. Manpower <sup>3</sup>	\$176.00
4 man-days (professional) per school, consisting of 3 visitation days, plus one day of office work	
One day (secretarial)	18.00
2. Travel	12.00
3. Miscellaneous	<u>5.00</u>
4. Total	\$211.00

61 schools X \$211.00 = \$12,871

The Camden Report (properly titled A Survey of the Camden City Public Schools), published in November 1969, was the Department's first attempt at a comprehensive evaluation of an entire school system. All aspects of the district's educational program were examined. The district's strengths and weaknesses were pointed out, and copious recommendations were offered. Individual reports were prepared on the following topics:

Elementary School Program  
Secondary School Programs  
Special Services  
Health Services  
Vocational Education  
Educational Facilities  
Pupil Transportation  
Revenues and Expenditures  
Accounting and Business Practices  
Program Audits: School Lunch/Milk; MDTA; Title VI-A  
School Library Services  
Equal Educational Opportunity  
Racial Balance  
ESEA Title I and III Programs

In addition, the Camden survey carefully explored community, State and National factors which have an impact on the quality of education in the city. The survey took slightly more than one year to complete, because most staff were participating in it while fulfilling their regular assignments.

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<sup>3</sup>Salary expenses shown in each cost breakdown are supplied by the division responsible for the activity. There may be some variation in average professional costs for different activities.

The survey enlisted the aid of 118 Department professionals, plus the services of outside consultants. Here is a brief summary of their activities:

- a. Interviews were conducted with the chief administrators and members of the Board of Education to document their perceptions of the most severe problems being confronted by Camden.
- b. The Office of Federal Assistance conducted a careful analysis of the Title I program, including visits to Title I schools, a review of the Title I application and an attempt to establish the role of the community in the Title I program.
- c. The Division of Business and Finance conducted a spot audit of the books of the Camden School System, visited each school building to determine its safety and condition, and reviewed the financial condition of the city. School transportation procedures were reviewed.
- d. Teams from the Department were established to visit every school in Camden, and to take note of the atmosphere and activities at each school. This included an analysis of library services, audio visual resources, the attitudes of teachers and principals, and unusual programs.
- e. The Division of Vocational Education conducted a two-day review of vocational programs and facilities.
- f. The Office of Equal Educational Opportunity reviewed the problems of segregation and integration, plus the progress being made in developing curricula relating to blacks and Puerto Ricans.
- g. All available statistics and information were provided by the Department's Office of Statistical Services for review prior to on-site visits and for use in the preparation of this report.
- h. Outside consultants were employed by the Department to assist in the review and to supplement reports in various areas (desegregation, ESEA Title III, school system organization and management, overall appraisal).

In all, the Camden School system evaluation comprised 426 man-days of on-site visits by the 118 Department professionals, plus half of that amount of time devoted to report writing. An additional 50 days was contributed by ten outside educational and editorial consultants. No record was kept of time spent by LEA and community people in Camden or by Department non-professional employees.

At an average rate of \$80 a day (salary, fringe benefits, travel, administrative overhead), the 684 professional man-days represented an expenditure of approximately \$55,000. Based on that amount, unit cost figures for Camden schools and pupils are as follows:

Average Cost (School)

1. Number of schools:	32	
2. Evaluation costs:		\$55,000
3. Cost per school (2÷1)		\$ 1,719

Average Cost (Pupil)

1. Number of pupils	20,146 (as of September 30, 1968)
2. Evaluation cost:	\$55,000
3. Cost per pupil: (2÷1)	\$ 2.73

It should be emphasized that since the Camden survey was the first time the Department had undertaken such a comprehensive evaluation, future efforts of this kind might be done more rapidly and economically.

B. Future Developments

1. The Bateman Plan-- The report of the State Aid to School Districts Study Commission<sup>4</sup>, whose major recommendations are embodied in a bill presently before the New Jersey legislature (Senate 575), proposes a thorough revamping of the State's program of fiscal aid to local school districts. Under the suggested plan, six separate district classifications would be recognized. An incentive equalization program would be adopted; under the new formula, districts will be "granted assistance in relation to their educational responsibility and fiscal capacity, with higher State support granted to districts which operate better quality programs."<sup>5</sup>

The above citation summarizes three major provisions of the Bateman Plan:

- a. The "educational responsibility" of a school district is not measured merely by the number of students it enrolls. Rather, the proposed plan recognized that it is more expensive to educate children from low-income families, those in vocational schools, and those in higher grades. As a consequence, pupil units are weighted according to the estimated cost of educating these different groups.
- b. The financial resources of a district, as measured by the equalized valuation of its taxable property, will affect the size of State support.
- c. Districts which provide "quality" education will be rewarded with higher State support than those offering minimally acceptable programs.

The latter provision should constitute a powerful impetus towards educational improvement. It also will ensure that school district evaluation takes on major importance.

The Bateman legislation, in its present form, does not prescribe the specific qualifications for each district classification. Instead it delegates that responsibility to the Commissioner of Education:

"For the purpose of computing State Aid, the Commissioner, with the approval of the State Board, taking into consideration the quality of the educational program and the organizational structure of the districts, shall

<sup>4</sup> A State School Support Program for New Jersey (Bateman Report).

<sup>5</sup> Ibid, p. 39

determine criteria and standards to be used in judging what shall constitute a non-operating district, a basic district, a limited district, an intermediate district, a comprehensive district and a superior district. Such criteria and standards shall be formulated annually."<sup>6</sup>

If a school district wishes to be classified in a category higher than Intermediate, its school board must file a request through a report to the Commissioner:

"The report, with supporting evidence, shall describe the program which will be in effect during the school year for which the calculation of State Aid will be made and it shall contain a written statement of the board's philosophy and objectives of education as well as the board's proposed program of evaluating the attainment of the board's philosophy and objectives."<sup>7</sup>

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<sup>6</sup> An Act Concerning State Aid to Education. (Senate, 575) p. 5, lines 26-34.

<sup>7</sup> Ibid. p. 6, lines 58-64. Emphasis added.

#### IV. STATE-WIDE EVALUATION

This category involves the collection and analysis of information about the inputs, process, outputs and environment impinging on education throughout the State. Input data concerning school facilities, instructional staff, pupil characteristics, and community characteristics and financial ability are gathered. Output data relating to potential and achievement are gathered to provide information on the educational progress of the state system. The product of this evaluation should be enhanced capacity for intelligent decision making at both the state and local level. The data may be organized in a variety of ways: for the state as a whole, by geographical region, by individual school districts, or by school district types (urban-suburban-rural, high-medium-low socio-economic level). Both attitude surveys and hard data may be utilized. And state-wide pupil testing is a potential part of this category.

In New Jersey, the anticipated installation of a Departmental Management Information System should give us the potential capability for this type of statewide evaluation.

##### A. Current Activities

State Departments of Education across the nation are becoming increasingly concerned with requirements for some form of accountability in the educational program of the schools. The degree of concern is in direct proportion to the state's share of the financial support of the education program. As legislatures approve funding which accounts for 40 per cent or more of the cost, there is greater concern for better accountability of the expenditures.

Three distinct forms of effort can be identified as attempts by State Departments to develop solutions for accountability. These are categorized as:

1. Attempts to re-orient local districts toward defining their programs in output or operational goal statements.
2. Attempts to develop sounder and more immediate data bases for evaluation purposes.
3. Attempts to identify and deal with the difficult to quantify human relationships and processes which are the critical factors in the organization's effectiveness.

There is a wide-range variance between states in these efforts. The majority, at the present time, are working simultaneously within the first and second categories. Very few have come to grips with the third category. The interest of at least 27 states in the first two categories is evident by their participation in the Belmont Project, a systems approach to the evaluation of Federal funding in education.

During the 1967-68 school year, Educational Testing Service conducted a national survey of state testing programs. For the survey, a state testing program was defined as any organized, coordinated, centralized effort to provide some type of test materials or services on a state basis. Employing this definition, it was possible to distinguish 74 testing programs in 42 states with 18 states offering two or more programs. There was a range from states



furnishing virtually every conceivable service associated with testing to states that merely offer assistance to schools or school districts in developing and/or improving their local programs.

For example, a number of states recommend that one or more tests be administered in the public schools as a basis for the authorization of Federal funding. These states typically provide a listing of tests from which local schools may select those they wish to administer.

(Note: An overview of the study as presented by Educational Testing Service is given as Appendix B to this report).

State testing practices are varied in every aspect of procedure. Procedures can be varied in four areas: (1) test construction, (2) administration, (3) scoring, and (4) analysis and reporting.

Test construction is identified within three areas:

1. Department or state institutions constructing the tests. The Iowa Test of Basic Skills and the Iowa Test of Educational Development are constructed in the College of Education at the University of Iowa.
2. Department contracted test construction with testing agencies. Michigan and Ohio have contracted with ETS to construct testing batteries for their respective states.
3. Department listing commercial testing batteries on approved lists.

#### Test Administration

The questions of "who," "what," "when" and "how" are administrative decisions. The "who" ranges for students in grades one through twelve. California has reading tests which are mandatory in grades one, two, and three. The common pattern is to test at the elementary level for basic skills and at the secondary level for educational development. In California in 1971-72, a student must show an eighth-grade performance level to receive a high school diploma.

Tests are administered generally in the early fall -- usually October. At the elementary level, grades three and six are most common. Grades nine and eleven are most common at the secondary level.

How tests are administered varies from direct administration by testing bureaus within State Departments to University affiliation, as in Florida or Iowa. The general pattern is to send the test packets to the school, where supervision is given by local personnel.

#### Test Scoring

Test scoring has a variety of patterns, with the most common method being local responsibility. The local district can hand-score the test, using teachers, or contract with test scoring service bureaus. In this instance, results are sent into the Department.

Ohio scores its testing battery in the testing bureau. In Iowa, a corporation has been set up to do test scoring. Many other states have contracted with ETS to score the tests.

#### Analysis and Reporting

Where testing is state-wide, either mandatory or voluntary, the common practice for State Departments is to assemble the scores and report to the districts on established norms. Norms are usually compared between schools within the district, a larger geographical area such as the county or the region, and the state. In all instances, the privacy of the district is protected by guarantees between the Department and the districts of the confidential nature of the information. The use of the scores is a mutual agreement contract.

#### Financing

The cost of state testing practices ranges from a low of \$ .46 per pupil to \$2.00 per pupil. In Michigan, where the legislature appropriated \$250,000, the Division of Research, Planning and Evaluation contracted with Educational Testing Service to test all fourth and eleventh grade students in the state in the achievement of basic skills.

The common pattern across the nation is local district purchase of the service; e.g., Iowa and Ohio. However, there are variations. In California, districts are required to budget \$1.75 per pupil for the testing program.

In New York, all third and sixth grade pupils are tested in reading and arithmetic. The cost of this program is paid from Title I funds.

In the Quality Assessment Project in Pennsylvania, the cost is approximately \$1.25 per pupil and is carried by an appropriation from the state legislature. This is a limited program using a sample of 100 schools and two grades within those schools.

Evaluation using testing practices in the difficult areas is underway in New York, California, Iowa, Pennsylvania and Michigan. Florida is exploring a number of possible approaches, beginning with a five-year phased management information system plan. Their investment cost in the equipment and staff is \$1.5 million at this time.

#### B. Future Developments

1. Management Information System. The Department has established as a high priority the development of a management information system (MIS). The plan is designed as a three-stage project which culminates in an operational system at the end of two years. Phase I has been approved and has now begun.

The three stages are identified as:

- a. Exploration and Design
- b. Development and Field Testing
- c. Operation

The major characteristics of a management information system are uniqueness and flexibility. The system is unique in that it must be designed for particular management requirements. There is no stock model or catalogue of existing models from which the Department can make a selection. The requirements for a Department model are translated into specifications which must be developed.

Flexibility is the second major characteristic. This is translated into an open-ended system with capabilities for expansion. Experience has proven that no major operating management information system developed is fool-proof, complete design. As systems become operable, new data requirements are generated from the user level. It follows that as people learn, they have a desire to want to know more.

The system for the Department needs to be flexible because of the major requirements imposed by the Department. The first requirement of the system is to provide a more efficient means through machine processing for carrying out Department data routines.

The second requirement is an analytical capability for processing data. The system would provide staff with statistical models to provide information for decision-making and/or the opportunity to field-test models which are staff developed. This is a planning, evaluation, and research capability.

The third requirement is a quick-query system for top-level management. The system would have the capability of quick retrieval of information upon the request of management for on-going operations. An example of such information would be the number of children enrolled in non-graded primary classes and their location in the state.

The Department is currently engaged in the activities under Stage I. Through the State Department of Treasury, bid proposals were solicited from management consultant firms to develop the specifications for an information system. In this study, a thorough analysis would be made of the Department's data operations, with documentation and a conceptual design of a system presented for approval. The specifications would be written for the operational requirements of the design and a development schedule.

2. Evaluation Models - As an adjunct to its work on a management information system, the Department has investigated a variety of evaluation systems and has initiated the development of two models. Proposals of evaluation models have been submitted to the Department by Dr. Malcolm Provus of the Pittsburgh Public Schools and the E. F. Shelley Corporation.

The principle of discrepancy underlies the Provus Model. Discrepancy is described as the measured difference between the expected and the actual outcomes of a program. The problem for which the solution would be developed is the identification of key variables in the measuring process. Simply stated: "Can five variables be as valid as twenty-five?" The management information system, in this case, would be field-testing the model.

The E. F. Shelley Corporation proposal is essentially directed toward school district evaluation. It is called an educational audit. The sum total of all district audits is the state evaluation. The proposal as presented is in its initial stage of development. It proposes to use the available data at the school district and use opinion questionnaires with teachers and students to correlate attitude with achievement. As in the Provus proposal, field-testing plus further design and development are necessary. The development costs of this system are estimated at \$1 million over two years.

3. National Assessment - The National Assessment of Educational Progress project has been in operation slightly less than six years. During the 1968 and 1969 school years, the first assessment instruments were administered to the population. The results are being analyzed and a report is due in the spring of 1970. The Project Board is exploring the possibility of working with states to develop state evaluation systems based on the instruments developed by the project.

## V. PROJECT (or PROGRAM) EVALUATION

This category comprises the evaluation of specific projects, either in response to Federal mandates under categorical aid programs (ESEA Title I, III, etc.) or as required by a Department of Education directive. In addition, individual school programs (reading, career development, sex education, physical education, etc.) are frequently selected for special examination and analysis.

### A. Current Activities

1. The Division of Vocational Education is charged with the evaluation of Federally funded exemplary vocational projects. The responsibility of evaluating a particular exemplary project lies with the project director or supervisor.\* In order to fulfill this responsibility, he has to secure sufficient evidence to answer two questions: namely, (1) To what extent has the project been implemented? (2) To what extent has the project achieved its objectives? Following is an outline of the major steps for evaluating an exemplary project:

- a. List the major tasks (services or activities) the project applicant is committed to perform.
- b. List the objectives of the project as proposed by the project applicant and approved by the Division.
- c. Define the objectives in behavioral terms and devise measuring scales for weighing success or failure for each of the objectives.
- d. Develop instruments for collecting factual data with respect to both project implementation and achievement.
- e. Collect data.
- f. Process the data for the purpose of answering the two central questions:
  1. To what extent has the project been implemented?
  2. To what extent has the project achieved its objectives?

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\*For projects of relatively large scale, evaluation committees may be organized to serve in an advisory capacity.

g. Write the evaluation report, using this outline:

1. A brief description of the project
2. Major tasks (services or activities) and objectives
3. Evaluation design in brief
4. Findings and conclusions
5. Recommendations
6. Appendices (measuring scales, data collecting instruments)

h. Submit the evaluation report through the proper channel.

To evaluate each of the 256 projects currently operating under the Pilot Project Program, the following estimated annual cost is anticipated:

1. Manpower	
1 man-day (professional) per project	\$44
$\frac{1}{2}$ day (secretarial)	9
2. Travel	10
3. Miscellaneous	5
4. Total	<u>\$68</u>

$$256 \text{ projects} \times \$68 = \$17,408$$

2. The Office of Federal Assistance directs evaluation activities for ESEA Title I projects and coordinates evaluative procedures for other Federal programs.

Title I grants are made to 430 school districts, with pupil participation totaling approximately 68,000. The State's Title I allocation for Fiscal Year 1970 is roughly \$18.5 million -- \$300 per child. Twenty-six school districts, accounting for 46,154 Title I participants, each receive more than \$100,000. They are:

Asbury Park	Neptune Township
Atlantic City	Newark
Bayonne	New Brunswick
Bridgeton	Orange
Camden	Passaic
East Orange	Paterson
Elizabeth	Perth Amboy
Franklin Township	Plainfield
Hackensack	Pleasantville
Hoboken	Toms River
Jersey City	Trenton
Lakewood	Union City
Long Branch	Vineland

Title I evaluations are customarily performed by local school district personnel. The LEA coordinators of Federal projects, plus a varying number of clerical employees, carry the major responsibility. For cost and work unit data, the 1968-69 Hoboken Title I project can serve as an example of the resources needed:

a. Total Title I Allocation	\$285,948
b. Evaluation Cost (30 man-days -- professional and clerical --- at an average rate of \$50 per day)	1,500
c. Percentage of evaluation cost to total allocation (a ÷ b)	.524%
d. Evaluation cost per Title I pupil	\$ 1.25

In some instances, outside consultants are hired to evaluate Title I projects. In Newark, the 1968-69 project was examined in a year-long evaluation by Planners Associates Inc. This evaluation, which included in-depth studies of sixteen Title I schools, was conducted by 17 personnel (13 professional, 4 non-professional).

a. Total Title I Allocation	\$4,443,504
b. Evaluation Cost (Contracted price; log of man-days worked not available)	98,000
c. Percentage of evaluation cost to total allocation (a ÷ b)	2.2%
d. Evaluation cost per Title I pupil	\$ 3.45

The annual evaluation reports from the 430 Title I districts are sent to the Office of Federal Assistance, where they are reviewed for statistical and program accuracy, collated, printed, and sent to the Title I coordinators of all other states and to the U. S. Office of Education.

3. The Division of Research, Planning and Evaluation assists in strengthening the evaluation process mandated for Federal ESEA Title III projects. Each project is subject to two evaluations:

- a. Local. The local school district arranges an evaluation of its own project. LEA personnel may conduct the evaluation, or it may be done under contract with an outside consulting firm. If a consultant is employed, the cost might reach as high as \$5,000. New project applications must earmark a minimum of 5% of the grant for evaluation.
- b. Central. This evaluation is coordinated through the Division of Research, Planning and Evaluation. It may be either an Audit Evaluation, involving 1-2 people from within or outside the Department, costing up to \$300; or it might be a Team Evaluation, with charges ranging up to \$1,200. Team Evaluations may be accomplished by Divisional staff members, by sub-contract with an intermediate unit (Educational Improvement Center, Urban Schools Development Council), or by contract with an outside consultant.



Because of the wide variation in project type and scale, it would be meaningless to compute an average cost per pupil for Title III evaluations.

## B. Future Developments

1. Belmont Project. The Belmont Project is a joint agreement between the Chief State School Officers and the United States Office of Education to cooperatively develop a consolidated evaluation system for federal programs. This agreement, the first in the history of education, was made at the August 1968 meeting of the Chief State School Officers.

It was the understanding that in Fiscal Year 1969 a broadly representative group of states, mutually agreed upon, would participate in pilot instrument development. New Jersey was one of the original seventeen states selected and has participated in all Belmont Project meetings. In Fiscal Year 1970, the number of states had expanded to twenty-six.

The first meeting of state representatives and Office of Education staff was held in January 1969 at the Smithsonian Conference Center's Belmont House in Maryland. Three committees were organized:

- a. Consolidated Program Information Report Committee
- b. Instrument Design Committee
- c. Staff Training and Dissemination Committee

Since January 1969, there have been five national and two regional meetings. The national meetings have been work sessions, while the regional meetings have been instrument review sessions with local school district representatives.

The target date for the implementation of the final system is the 1972-73 school year. The work breakdown structure includes the development of questionnaires, field tests of the questionnaires, analyzing the information, and refining the questionnaires.

The total system is divided into four sub-sections for which information is collected:

- a. Consolidated Program Information Report (CPIR) instrument is developed and currently being field-tested in eighty-seven New Jersey districts. This instrument reports all Federal programs by source of funds in a school district.
- b. Pupil Centered Instrument (PCI) is a battery of four questionnaires (1. school district; 2. building principal; 3. classroom teacher; 4. student). The purpose of the instrument is to describe the environment of the project. Intensive work was done on this instrument during the past winter. It will be field-tested in April, 1970.

- c. Project Descriptor Instrument (PDI) is in the opening stages of development. It will not be ready for field-testing until the fall of 1970.
- d. Common Status Measure (CSM) instrument is in the planning stage of development and will not be field-tested before the spring of 1971.

The purpose of the system is to consolidate the reporting and evaluation requirements for the following legislation:

Elementary and Secondary Education Act - Titles I, II, III,  
V-503, VI, VII and VIII  
National Defense Education Act - Titles III and V-A  
Civil Rights Act - Title IV  
Follow Through  
Vocational Education Act of 1968

2. Section 402, Title IV, ESEA Amendments of 1967. Under this legislation, \$100,000 will be allocated annually to each state during Fiscal Years '70, '71, and '72 for the planning and evaluation of Federal programs or projects. These funds may be used for the following purposes:

- a. Staffing and supporting a planning and evaluation component in the State educational agency.
- b. Training SEA staff in planning and evaluation procedures and techniques.
- c. Providing consultative and technical assistance and services in planning and evaluation to intermediate and local educational agencies.
- d. Designing, developing, installing and maintaining planning and evaluation systems and procedures in the State educational agency, and conducting appropriate studies and surveys.

## VI. PROGRAM OBJECTIVES

The purpose of evaluation is to foster change by revealing shortcomings which must be remedied if specific education goals are to be achieved. Evaluation should tell us how well students are learning those things the schools are trying to teach. It should also disclose which services schools are not delivering to children...which effective qualities they are neglecting to nurture. Finally, evaluation should contribute to financial accountability: it should tell us whether funds are being used effectively and for the purpose intended.

Here are a number of objectives, primarily of the long class, which would seem to be potential sites for attainment of the ends listed above.

1. To raise the number of trained education evaluators

### Data Indicators

1. Number of approved education evaluators
2. Number of persons enrolled in education evaluation training programs or courses
3. Number of colleges and universities in the State offering evaluation courses
4. Number of courses offered
5. To strengthen evaluation capability at each administrative level

### Data Indicators

1. Number of DEAs with full-time part-time evaluation
2. Number of County Superintendent offices or other intermediate agencies with full-time part-time evaluation
3. Number of persons engaged in full-time part-time evaluation activities in the Department of Education
4. To expand administrative evaluation instruments

### Data Indicators

1. Number of DEAs with administrative support for general use of evaluation instruments
2. Number of DEAs with administrative support for general use of evaluation instruments
3. Number of DEAs with administrative support for general use of evaluation instruments
4. Total number of administrative support for general use of evaluation instruments

- D. To administer instruments which evaluate pupil performance in relation to local school district goals and to each of New Jersey's education goals.\*\*

Data Indicators

1. Number (or %) of State education goals evaluated by administering approved instruments to representative pupil populations
  2. Number (or %) of pupils by age (or grade level) evaluated against individual State education goals
- E. To expand school district evaluation activities so that all schools in the State (Nursery through Grade 12) are evaluated on a cyclical basis

Data Indicators

1. Number (or %) of all State schools participating in a self-study/visitation evaluation program (year)
  2. Number (or %) of all students in the State attending schools which participate in a self-study/evaluation program (year)
  3. Number (or %) of all State schools participating on a cyclical basis in the established evaluation procedure
- F. To evaluate school districts for Bateman incentive aid qualification \*\*\*

Data Indicators

1. Number of school districts (or %) evaluated according to Limited requirements (year)
2. Number of school districts (or %) evaluated according to Intermediate requirements (year)
3. Number of school districts (or %) evaluated according to Pre-Comprehensive requirements (year)
4. Number of school districts (or %) evaluated according to Comprehensive requirements (year)
5. Total number (or %) of school districts currently holding Limited status
6. Total number (or %) of school districts currently holding Intermediate status

\*\*This objective assumes that Statewide goals will be established in the near future.

\*\*\*Specific criteria for districts remain to be established.

7. Total number (or %) of school districts currently holding Pre-Comprehensive status
  8. Total number (or %) of school districts currently holding Comprehensive status
- G. To expand project evaluation activities so that all projects financed through the Department will be evaluated on a cyclical basis.

Data Indicators

1. Number (or %) of all projects evaluated (year)
  2. Number (or %) of all projects participating in a cyclical evaluation procedure.
- H. To increase expenditures for evaluation activities

Data Indicators

1. Total dollars spent on evaluation activities throughout the State (plus year-to-year % change)
2. Total dollars spent on evaluation activities as a % of all education expenditures (through grade 12) in the State
3. Dollars spent on standardized test administration (plus year-to-year % change)
4. Dollars spent on instrument development (plus year-to-year % change)
5. Dollars spent on training of evaluators (plus year-to-year % change)
6. Dollars spent on analysis of data (plus year-to-year % change)
7. Dollars spent on information dissemination (plus year-to-year % change)

## VII. PROGRAM ALTERNATIVES

### A. School Approval Model

The concept of school approval is based on a school building as the unit for evaluation. The process is a combination of self-study by the staff and an approving team visitation.

The cost analysis of the concept, based on the assumption that a school would be approved on a five-year basis, is:

Number of school buildings in New Jersey = 2,500 +  
Composition of team = 8 for secondary & 5 for elementary  
Period of team visitation = 3 days  
Cost per person on team = \$50 per day  
Operation of schools = 36 weeks per year  
Number of schools visited per year = 50 secondary  
440 elementary  
490

Number of schools evaluated per week = 14  
Staff requirements for 14 teams = 73  
Total Cost of Program =  
219 man-days per week X 36 weeks X \$50 per man-day =  
\$394,200 annually

Cost does not include administrative overhead...travel, expenses, secretarial, printing reports, etc.

#### Weaknesses

No guarantee of the generation of compatible data to provide state management with decision-making information.

The concept is not compatible with the proposed Bateman legislation as it relates to district classification rather than school classification.

Five years between approvals is a gap which makes it impossible to establish priorities based on problem identification. The state decision-maker would be concerned with the problems identified in 490 schools, 10 per cent of which are secondary.

#### Strengths

The capability of moving into a single school as the unit of evaluation.

## B. School District Evaluation

School district evaluation can fall into three categories:

1. School district approval
2. School district quality assessment
3. School district audit model

To our knowledge, there are no satisfactory operational models of school district evaluation systems in existence at the present time. Even if there were models, it would be necessary to make modifications in line with New Jersey requirements.

### 1. School District Approval

The school approval can be broadened to the district level as the unit of evaluation. It would follow the process of self-study plus evaluation team visitation. There are no standards for team size or scheduling, but from the Camden experience, the size could range from five to twenty-five persons.

The cost analysis of this concept is based on the assumptions of a five-year cycle of approval and an average team size of twelve persons.

Number of operating districts in state	=	574
Number of approvals per year	=	115
Average number of persons per team	=	12
Period of team visitation	=	5 days
Cost per person on team	=	\$50 per day
Operation of schools	=	36 weeks
Number of districts evaluated per week	=	3.2
Staff requirements for 3.2 teams	=	38.4
Total Cost of Program	=	
192 man-days per week X 36 weeks X \$50 per day = \$345,600		

Cost does not include administrative overhead, nor does it reveal hidden costs of follow-up of evaluation.

### Weaknesses

No guarantee of the generation of compatible data to provide state management with decision-making information.

Five-year gap between approvals is unrealistic in a changing environment and is not compatible with Bateman legislation for an annual process.

Does not provide a data base.

### Strengths

Maintains the capability of moving into a single school as the unit of evaluation.



Process has the capability to review a coordinated K-12 program.

Meets the requirement unit of school district stressed in the proposed Bateman Legislation.

## 2. School District Quality Assessment

School district quality assessment is a systematic approach to the measurement of the goals and objectives of education which are held to be common for all school districts. It would require a developmental period of from two to four years before an operational program was fully implemented.

The first step in school district quality assessment is the identification of the goals which would be stated as the common objectives for all the school districts of the state. Having determined the goals, the second task is the development of instruments to measure the objectives. This stage has no terminal point and becomes a continuous operation of instrument design for more discrete measures.

Stage three is a field test operation of the designed instruments for validity and reliability. Stage four is the generation of an educational profile from the data collected by the instruments. The educational profile, displaying a state norm for each of the objectives, is a report of the condition of the educational program of the state. Any district in the state could take its data from the instruments and compare its condition against that of the state norms.

A cost analysis of this concept is more difficult to arrive at in the context of this paper. The preceeding system's costs were operational, and for comparison purposes, the operational cost of this system should be used. The reader should be aware that the system would need to be developed, and development costs are investments which, of necessity, are higher than operating costs. Therefore, the following assumptions are made for the purpose of comparable analysis of cost:

1. The system is operational
2. State norms are developed annually
3. Grades 4, 8 and 11 are the base of assessment
4. A state sample will be drawn of 150,000 students
5. The cost is \$1.50 per student

The annual cost to the state would be \$225,000. This cost would include the salaries of a permanent staff assigned to quality assessment with the responsibility of developing the annual educational profile. It would cover the costs of the school districts drawn in the sample from state funds. The remaining districts would bear the expense for developing their norms from local funds.

### Weaknesses

No guarantee of all school districts participating in the assessment.

Current lack of valid instruments to measure objectives in the affective domain.

No follow-up procedure other than annual reports.

Is limited to common goals and objectives of all schools.

### Strengths

Provides state management with a current picture of the educational program and capability to establish priorities.

Department capability to identify problem areas for further investigation.

Gives school districts the capability of assessing their programs.

### 3. School District Audit Model

This concept is experimental and has not entered the developmental stage. The basic purpose is to develop a system which identifies and analyzes educational problems within a school district. The analysis would attempt to establish the cause and effect relationship existing in the identified problems and make recommendations based on this evidence.

The concept combines the visitation feature of the district approval model with the analysis feature of quality assessment. However, it proposes a greater depth to the analysis than is contained in quality assessment. Quality assessment identifies the existence of a problem; the audit proposes to determine why it is a problem.

A school district audit requires a team with the ability to identify data needs and make the analysis. At this stage, the experimental, the analysts are not certain of what data is necessary and propose to conduct studies to determine valid and reliable measures.

A proposal has been given to the Department to conduct such an experiment over the next three years at an annual cost of \$500,000.

### Weaknesses

No assurance of compatibility of data from school districts for state management decision making.

Time involved in accomplishing an audit for a local system by Department staff.

Expense to state in doing the data processing required for the analysis.

## Findings

The use of local consultants for carrying out the local educational planning work is a valuable asset to the Department as a planning tool.

There is a Federal program for the improvement of the Department's work in evaluation.

## Conclusions

The Department of Education is accountable to the House of Representatives for the use of the evaluation of the Department's work.

1. The Department and Elementary Education Act
2. The National Education Act
3. The National Defense Education Act
4. The Education Professional Development Act

Approximately 1,000 projects are approved annually for funding by the Department under the various titles contained in the above-mentioned acts. The project evaluation system exists within the Department to meet the requirements of these acts. These projects are recorded in the approved State Plans which were written for the administration of the separate titles. Funding for the evaluation activities are charged as direct costs or added to administration as indirect costs.

Title I projects of the Elementary and Secondary Education Act range from \$500 to \$100,000. The Title I staff monitors the larger projects as an ongoing evaluation process. Local districts submit part of the cost for evaluation. In one district, a consultant firm was contracted at \$10,000 for an evaluation of the project.

National Education utilizes the professional staff employed with administrative funds under the various titles to monitor the approved projects under the titles. Monitoring is viewed as an administrative function of evaluation. In addition, the Advisory Council, empowered by the law, is considering a contractual agreement with an outside agency to conduct an evaluation of the Vocational Education Act. The Vocational Division has employed this practice in the past.

Title III of ESEA has used consultant teams to conduct on-site evaluations of its funded projects. The cost of this evaluation process has averaged \$1,000 a project.

Applying the \$1,000 cost to a thousand projects would result in an annual cost of \$1,000,000 for project evaluation. The total Federal appropriation to the Department of Education in fiscal '69 was \$70,000,000. The cost for evaluation would represent 1.5 per cent of the appropriation.

An option for project evaluation would be the consideration of a performance contract for project funds. The cost of evaluation would be a built-in factor of the contract and would be reported as performance delivered as stated in the grant. This type of operation would establish an on-going evaluation procedure rather than an ex post facto analysis of the project.

The Belmont Project is a systematic attempt to coordinate evaluation for Federal funds. The workload for the system at the state level has not been fully developed, but preliminary estimates indicate a full-time professional with secretarial assistance is a minimum requirement to coordinate the effort. This estimate does not reflect the cost of data processing or reporting results. It also omits the vital element of monitoring projects to provide services to the districts.

#### D. Syncretic Model

The Department of Education is confronted with the problem of developing a system which provides the means for meeting its evaluation responsibilities under State and Federal legislation. These responsibilities place the Department in the dual role of being held accountable, and at the same time, holding local school districts accountable to it. To meet these responsibilities, the model should be a unified system with a total capability for state assessment, district evaluation, and project evaluation.

The purpose of a syncretic model is to attempt to design a system which preserves the strongest features of each program alternative while overcoming its major weakness. For example, the major question, "What are we purchasing for our educational expenditures in terms of performance?", is not answered adequately in the program alternatives.

The model must also relate to the projected future activities of the Department as can be determined from an assessment of the current status. In this respect, three major events must be considered as influencing factors:

1. The initiation of the state needs assessment project, "Our Schools";
2. The initiation of the preliminary study for a management information system;
3. The responsibilities of the Department in the possible implementation of the Bateman State Aid legislation.

The establishment of state goals and objectives for the educational system implies that indices of measurement will be developed which report current conditions. To develop state norms, the indices must be derived from standardized instruments which are valid and reliable. The indices should be developed annually if needs assessment is to be related to the Bateman Aid formula.

With the utilization of standard instruments, comparable data could be available to the Department of Education and local school districts to construct profiles of districts with similar characteristics. The Department can identify problem areas from the profiles. This identification of a problem area is the first signal of the need for further problem analysis. While indices provide the evidence of where and to what degree a problem exists, an analysis is necessary to determine the cause and effect relations which exist and the solutions to be recommended. This analysis would be accomplished by on-site evaluation service teams from the Department.

The Management Information System (MIS) would provide the physical capability to store, process and retrieve information. The system, when developed, should prepare routine reports, have a rapid retrieval capability, and perform the statistical functions of problem analysis. A major output of the system would be the annual educational indices of state goals and objectives as measured by the needs assessment program.

Solutions recommended in problem analysis could be in a research or project format. From the data bank of the MIS, the evaluation team would retrieve information on projects which are related to the problem area. The recommendations would then be more accurate predictions of expected outcomes from alternative solutions, in terms of reasonable expectations over given

time periods and at given expenditure levels. The selected alternative would be monitored as a project by the Department, and the outcomes would become input to the MIS data bank at the end of the project.

An innovative research solution to the problem would require additional Department services. Stricter controls would be established, but the procedure for information flow to the data bank would be followed.

The syncretic model is a two-step approach to evaluation with a continual process for information input. Its major strength is the ability to identify problem areas in the educational system and to measure change over time. From the identification of problem areas, the Department can structure priorities as the basis for concentrated Department on-site evaluation analysis services. The analysis would begin at the Department, where the MIS would provide the evaluation team with historical data. This data could be in the form of school district profiles and compared over several years. The evaluation service team would then determine why differences exist and make recommendations which might be in the form of technical assistance to the local school districts. This process could be related, then, to the Federal and State grant-in-aid programs and projects.

The Bateman State Aid legislation has implications which will require a realignment of the Department's current evaluation procedures. The Department's responsibility for the certification of school districts into categories makes our present school approval program obsolete. Certification requests on forms designed and supplied by the Department of Education could provide an information base for school district profiles as previously described. Certification also suggests the processes of review, approval and verification. Verification procedures could require an on-site team or an individual audit evaluation. The syncretic model has this feature.

The syncretic model needs to be developed. At the present time, within the Department, an information base of process measures, i.e., tax base, expenditure level, organization of district, numbers of students by grades, numbers of professional staff, etc., is available to structure a state profile. However, without product or outcome measures, there is no means of relating this information to performance.

The model is dependent upon a statement of performance goals and objectives. The initial stage, as we are presently proceeding in the "Our Schools Project", is the development of the objectives. In the second stage assessment instruments should be constructed and distributed to the local school districts with directions for the administration, scoring, recording and reporting. It is not necessary to wait until stage one is completed before stage two implemented. The implementation of stage two could begin in the next school year in the area of the basic skills at the elementary school level.

It would be to the advantage of the Department of Education to begin the implementation of stage two. The information is basic to the model and benefits state assessment, school district evaluation and project evaluation. It will produce base-line data imperative to planners at all levels. It is an information need which will be a major determinant in the development of the management information system. (The preliminary study for the design of the system will begin May 1, 1970. The first phase is to determine the data base required by the Department and to produce a conceptual model from this by August 1970).

The system approach of the syncretic model attempts to synchronize the separate evaluation functions being conducted within the Department at the present time. It shifts the emphasis from the present philosophy of evaluation as an approval concept to a future concept of evaluation as a problem analysis oriented services model. It provides services to Department staff and local school districts through its capability to generate relevant information in terms of cost-benefits and cost effectiveness to the achievement of predicted outcomes. It builds in a way to return information which assesses and verifies its own effectiveness. This loop provides the basic information by which the Department's accountability to its constituents is evaluated. It measures the effectiveness of the decision of the past to produce change.



### VIII. BASIC CORE OF RECOMMENDATIONS

Since September 1969, the State Board Sub-Committee on Evaluation and Testing has conducted a thorough examination of education evaluation practices in New Jersey. The Sub-Committee's work was based on the conviction that it is imperative to know the precise effects which education has upon the students of this State. Without such knowledge, our schools will lack the capacity for intelligent change, for sound program development, and for responding to the insistent call for accountability.

The Sub-Committee's inquiries have revealed a substantial number of well-conceived evaluative activities. Nevertheless, the group found significant shortcomings which must be remedied if the Department of Education is to satisfactorily fulfill the service, regulatory, and leadership roles it has undertaken.

The following recommendations for action distill the Sub-Committee's conclusions. They are divided into concerns which require immediate action and those which must be considered in the years ahead.

#### Recommendations for Short-Range Action

##### A. School District Evaluation

The new evaluative and consultative obligations demanded by the Bateman legislation will make the existing school approval program obsolete. The Commissioner should ensure that Department personnel are retrained for their new functions and responsibilities. Local school districts should be involved in any new evaluation criteria developed.

##### B. State-Wide Assessment

The Sub-Committee noted with interest the increasing number of states adopting a state-wide assessment program. While the "Our Schools" project will include preliminary steps in this direction, further action seems required. The State Board should adopt a policy for state-wide testing of basic skills, and the Department should draw up plans for the early implementation of this policy with involvement of the various publics concerned with education in the state.

##### C. Project Evaluation

The increasing number and complexity of Federal and State grants demand a greatly improved project evaluation system. All Department projects with large potential impact, as defined by the Commissioner, should be evaluated once a year by an independent evaluation unit within the Department. Any re-approval action required by the State Board or the Commissioner should be supported by a statement evaluating the previous year's activities. The Department's evaluation capacity should be strengthened accordingly, and additional necessary resources should be allocated for this purpose. Hopefully, a way will be found to evaluate projects within a more comprehensive framework in the entire local educational system.

### Recommendations for Longer-Range Action

#### A. Needs Assessment

While basic skills testing is an appropriate starting point, evaluation activities should contribute to the assessment of the specific education goals and objectives established through "Our Schools", the state-wide and local needs assessment program. Adequate means must be developed to measure progress in all major goal areas.

#### B. Management Information System

The Department's Management Information System, presently in Phase I of development, should have the capacity to collect and store the data required for expanded evaluation activities of the Department, including school district evaluation, project evaluation, and state-wide assessment.

#### C. Cost Analysis

The recent efforts of the Department in the areas of PPB and cost analysis should be continued and specifically related to longer-range evaluation activities.

#### D. Instruction

The Department should work with local school districts to develop suitable techniques for evaluating professional personnel.

#### E. Department Task Analysis

The Department should develop the capacity to periodically analyze and evaluate itself.

IX. ADDITIONAL QUESTIONS FOR CONSIDERATION

- A. What special studies are required to refine our knowledge of evaluation programs and techniques?
- B. Should we devise special mechanisms for the evaluation of teachers and administrators?
- C. How do you reduce the apprehension which students, parents, teachers, and administrators may feel when evaluative activities are intensified?
- D. Should we undertake a comprehensive evaluation of the internal functioning and capabilities of the Department of Education?
- E. Does the feasibility of state-wide testing require further examination?
- F. Should we recommend a halt to further development of the school approval system?
- G. As evaluation activities expand, can we anticipate any economies of scale? Or will administrative and organizational requirements produce cost diseconomies?
- H. Would it be preferable to locate the evaluative function outside of the Department?
- I. How do we cope with education's delayed payoff?
- J. Should the establishment of education goals for the State precede further development of any major evaluation program?
- K. Will the Department's forthcoming Management Information System adequately meet the needs of the syncretic model outlined in Part VII?
- L. What should be the role of extra-institutional evaluation agencies or groups; e.g., Educational Testing Service, the College Entrance Examination Board, the National Assessment Project?
- M. How should we evaluate pre-school and continuing adult education programs?
- N. Should we weigh the desirability of evaluating non-public schools and pupils?
- O. What special problems are raised by pupil mobility?
- P. What influence will the Federal Government have upon future evaluation activities in New Jersey?
- Q. Is it advisable to develop--and perhaps disseminate--a master plan for evaluation, covering objectives and activities for short-range, intermediate and long-range implementation?

APPENDIX A

ANALYSIS OF DEPARTMENT OF EDUCATION SALARY COSTS

1. Calculation of Work Year for 12-Month Employee.

365	
- 104	Saturdays and Sundays
<u>261</u>	
- 11	Holidays (average year)
<u>250</u>	Basic work year, not including sick leave and vacation, both of which vary according to type of personnel.

Professional Personnel

<u>Unclassified</u>	<u>Classified</u>
250	250
- 22	- 12 (used as average)
<u>228</u>	<u>238</u>
- 5	- 5 Sick days*
<u>223</u>	<u>233</u> Potential work year

Secretarial and Clerical Personnel

<u>Young</u>	<u>Mature</u>
250	250
- 12	- 12 Vacation
<u>238</u>	<u>238</u>
- 15	- 5 Sick leave**
<u>223</u>	<u>233</u>

\*Estimated average usage.

\*\*It is felt by the Personnel Office that the usage of sick leave varies with the maturity of the employee.

2. Calculation of Work Year for 10-Month Employee.

365	
- 62	July and August
303	
- 86	Saturdays and Sundays
217	
- 4	Sick leave estimated
213	
- 8	Holidays estimated
205	

3. Calculation of Daily Salary at Selected Job Levels.

The median salary for the particular range has been divided by the number of days in the potential work year. This figure is entered in the salary column and represents a daily salary cost. In the next column, a factor of 20% for professional and 17% for secretarial-clerical personnel has been added on.

<u>Job Classification</u>	<u>Range No.</u>	<u>Potential Work Year (Days)</u>	<u>Salary</u>	<u>Salary Plus Fringe Benefits</u>
Helping Teacher I	28	205	\$52.76	\$ 63.31
County Supervisor of Child Study	31	223	56.14	67.37
Supervisor I	32	223	58.96	70.75
Director III	37	223	75.25	90.30
Director II	39	223	82.95	99.54
Director I	41	223	91.46	109.75
Deputy Assistant Commissioner	42	223	96.03	115.24
Clerk Stenographer	10	228*	\$19.71	\$ 23.06
Senior Clerk-Stenographer	14	228*	23.96	28.03
Principal Clerk-Stenographer	18	228*	29.13	34.08
Head Clerk	22	228*	36.19	42.34

\*The days in the potential work year for secretarial-clerical personnel are the average of the "young" and "mature".

Robert G. Bongart  
January, 1970

APPENDIX B

OVERVIEW OF EDUCATIONAL TESTING SERVICE SURVEY  
OF STATE TESTING PROGRAMS

Eight states indicated that they do not conduct a program. At least nine additional states provide only limited testing services. The following table portrays the number of states with one or more program:

<u>Number of Programs</u>	<u>Number of States</u>
1	24
2	13
3	2
4	1
5	0
6	1
7	0
8	1

The following 12 categories were developed to facilitate the compilation of pertinent data and to furnish a meaningful and consistent structure to each summary:

Purposes and Objectives: state and federal legislation affecting the program; specific objectives such as guidance, placement, general assessment of academic progress, course evaluation, high school and college equivalency, college admissions, identification of special problems and talent

Administration and Supervision: the state governmental agency, educational institution, or other organization that conducts the program and provides services; the individuals that administer tests

Grades: specific grades, grade levels, or ranges for which the program is designed

Tests: titles, editions, levels, and forms of all instruments used; areas of testing such as intelligence, achievement batteries, achievement tests in individual subjects, multi-aptitude batteries, interest inventories, readiness tests, scholarship examinations; indication of whether the tests are nationally produced, locally developed, or specially constructed by an outside agency

Norms: national or local norms, or both, and varieties of local norms such as state, county, school district, and school

Administration Dates: exact or seasonal dates of test administration; indication of whether dates are left to the discretion of participating schools or school personnel

Other Services: scoring, reporting, and special score interpretation services; consultations with students and parents (guidance and counseling); professional workshops and in-service training; facilities for handicapped students

Costs: student test fees, costs to participating schools, amount of reimbursement from state and federal governments, special appropriations by state legislature

Participation: voluntary or compulsory participation, programs that are strongly recommended by the state, and those that are required for a specific purpose or in a certain context; types of exemptions such as mentally retarded students; differential participation by public, private, and parochial schools

Number Tested: exact or approximate number of students tested annually and, if possible, the percentage of enrolled students that are tested

Reference(s): titles, authors, and publication dates of all materials and literature describing the program

For Further Information: complete name, title, and address of the person from whom more detailed information may be obtained

A detailed analysis of the accumulated data on eight of these categories follows, with a delineation of national patterns and implications. The Canal Zone, Guam, Puerto Rico, and the Virgin Islands are omitted in this analysis.

#### Purposes and Objectives

The specific purposes and objectives most frequently cited are listed in the following table:



	<u>Programs</u>	<u>States</u>
Guidance (Vocational and Educational Planning)	29	22
Evaluation of Instruction, Courses, Curricula, Programs	25	17
Student Evaluation (Assessment of Academic Progress and Status)	21	13
Scholarships and Other Awards	10	5
Identification of Special Problems and Talents (Diagnostic Testing)	9	7
College Admissions	6	6
Placement and Grouping of Students	5	5
High School and College Equivalency (Awarding of Diplomas and Credits by Examination)	5	3
Others	6	3
No Data Provided	19	17

Administration and Supervision

The number of programs conducted by the state, a college or university, and by a combination of both are indicated below:

	<u>Programs</u>	<u>States</u>
State Governmental Agency Exclusively	50	26
College or University Exclusively	17	7

	<u>Programs</u>	<u>States</u>
State Governmental Agency <u>and</u> College or University (Shared Responsibility)	7	9

#### Grades

Test services are offered in one or more grade at each level by the following number of programs and states:

	<u>Programs</u>	<u>States</u>
K-3	19	14
4-6	28	21
7-9	42	31
10-12	46	32
Adults	5	2
Others	6	4
No Data Provided	11	9

Twenty states provide testing in at least one elementary grade (1-6) and one secondary grade (7-12). Thirteen states test students at all four levels in the elementary and secondary grades, and six additional states offer testing at three of these four levels. Seven states provide test services in every grade from 1 through 12. Persons classified as "Others" include high school graduates, college applicants, students in junior colleges, technical institutes, and regular four-year colleges, and members of the armed forces.

#### Tests

Tests are analyzed in terms of types, nationally standardized

instruments most frequently used, and sources of test construction.

Each principal type of test is administered in the following number of programs and states:

	<u>Programs</u>	<u>States</u>
Intelligence Tests (Scholastic or Academic Aptitude, Ability, Mental Maturity)	38	31
Achievement Batteries	34	27
Achievement Tests in Individual Subjects	33	22
Multi-Aptitude Batteries	20	17
Interest Inventories	7	5
Readiness Tests	7	5
Others	14	8
No Data Provided	9	8

Types of instruments may also be compared on the basis of total occurrence (frequency) and number of different tests. Only nationally standardized tests are included under "Different Instruments."

	<u>Frequency</u>	<u>Different Instruments</u>
Achievement Tests in Individual Subjects	210	14
Achievement Batteries	80	21
Intelligence Tests	65	13
Multi-Aptitude Batteries	25	5
Interest Inventories	11	4
Readiness Tests	7	1

	<u>Frequency</u>	<u>Different Instruments</u>
Others	24	8

Intelligence and achievement testing of some kind are offered in 35 programs and 30 states. Measures of achievement (batteries and/or tests in individual subjects) are provided in 56 programs and 36 states. Eleven programs and 13 states offer both types of achievement testing.

Nationally standardized tests most often mentioned are:

	<u>Programs</u>	<u>States</u>
Large-Thorndike Intelligence Tests	12	11
Differential Aptitude Tests	12	10
School and College Ability Tests	11	10
California Short-Form Test of Mental Maturity	10	10
Iowa Tests of Educational Development	10	10
Stanford Achievement Test	10	9
Sequential Tests of Educational Progress	9	8
California Achievement Tests	7	7
Iowa Tests of Basic Skills	7	7
Metropolitan Achievement Tests	6	5
Otis Quick-Scoring Mental Ability Tests	5	5
SRA Achievement Series	5	5

The most frequently used nationally standardized test or battery of each type is listed below:

Achievement Battery	-	Iowa Tests of Educational Development
Achievement Test in Individual Subject	-	Cooperative English Tests
Intelligence Test	-	Large-Thorndike Intelligence Tests
Interest Inventory	-	Strong Vocational Interest Blank (for Men and Women)
Multi-Aptitude Battery	-	Differential Aptitude Tests
Readiness Test	-	Metropolitan Readiness Tests

Another significant question is whether a program makes use of nationally standardized tests directly available from test publishers, constructs its own instruments to meet individual needs, or employs the services of an outside agency to develop tests designed specifically for the program. The prevalence of these three types of arrangements, as well as certain combinations, may be seen in the following table:

	<u>Programs</u>	<u>States</u>
Nationally Standardized	54	38
Locally Constructed (By State, School District, or School)	17	7
Developed by Outside Agency	7	4
Nationally Standardized <u>and</u> Locally Constructed	7	6
Nationally Standardized <u>and</u> Developed by Outside Agency	1	3

	<u>Programs</u>	<u>States</u>
Locally Constructed <u>and</u> Developed by Outside Agency	0	1
Nationally Standardized, Locally Constructed, <u>and</u> Developed by Outside Agency (All Three)	0	1
No Data Provided	3	3

The number of tests of each variety, in terms of frequency and different instruments, appears below:

	<u>Frequency</u>	<u>Different Instruments</u>
Nationally Standardized	253	66
Locally Constructed	150	151
Developed by Outside Agency	17	15
Total Number of Tests	426	232

#### Norms

Twenty-five programs and 18 states offer local norms for nationally standardized tests. An additional 21 programs and nine states utilize locally constructed tests or instruments developed by an outside agency. Presumably these 21 programs and nine states provide local norms. Proceeding on this assumption, one might logically conclude that local norms are made available in approximately 46 programs and 27 states. No data concerning norms are provided for 12 programs distributed among 11 states.

### Administration Dates

The period of test administration most frequently mentioned is the fall (September through November), with October the month most often listed. Tests are administered strictly at the discretion or convenience of participating schools in 31 programs representing 22 states. A classification by month yields the following figures:

	<u>Programs</u>	<u>States</u>
September	11	11
October	17	16
November	12	9
December	4	3
January	5	5
February	5	5
March	7	6
April	5	5
May	4	3
June	2	2
July	1	1
August	1	1

Test administration times without specific month designations are indicated below:

	<u>Programs</u>	<u>States</u>
Fall	2	2
Spring	3	3
Beginning of School Year	3	2
End of School Year	2	2
Periodically or Throughout the Year	4	3
No Data Provided	5	4

### Other Services

Services, activities, and materials connected in some way with a testing program are often omitted in summaries prepared by states.



The following figures are the result of tallying the number of programs and states in which a certain service was definitely mentioned. They should therefore be regarded as highly tentative.

	<u>Programs</u>	<u>States</u>
Reporting	43	25
Scoring	42	25
Scoring <u>and</u> Reporting	40	24
Special Score Interpretation Materials and Services (Such as Item Analysis)	32	19
Professional Workshops and In-Service Training	14	11
Guidance and Counseling (Consultations with Students and Parents)	12	8
Other Services	14	11
No Data Provided	12	8

Included among "Other Services" are research programs, facilities for the handicapped (such as Braille tests), biographical forms, and special provisions for make-up testing or retesting.

#### Participation

With regard to participation, it is difficult to establish a distinct voluntary-compulsory dichotomy. A testing program may be completely voluntary for private schools and certain age groups, compulsory for public schools and specific grade levels, and strongly recommended for other institutions. A program may be generally voluntary (such as scholarship examinations), but an individual must participate if he wishes to earn a particular type of scholarship. Equivalency examinations are commonly taken by students and veterans seeking to

obtain high school or college credits or high school diplomas. The decision to participate is entirely theirs, but the test or battery given for this purpose may be the only one accepted by the colleges of their choice.

In this overview, most programs that are not strictly compulsory will be considered voluntary. This category embodies all scholarship programs, high school and college equivalency programs, as well as programs authorized by Title V-A of the National Defense Education Act. Any testing program required of public school students in selected grades is classified as compulsory, although it may be optional for nonpublic schools. Certain exemptions, especially for the mentally retarded, are expected in virtually all programs. Within the framework of this rather tenuous classification scheme, the following table was constructed:

	<u>Programs</u>	<u>States</u>
Voluntary	64	34
Compulsory	8	5
Combination of Voluntary and Compulsory Programs	--	1
No Data Provided	2	2

The appearance of an asterisk (\*) in any state summary denotes that no data were provided for that category.

Harry U. Felton